

VERMEULEN et al. -- 10/825,224
Attorney Docket: 081468-0309212

REMARKS

Claims 1-22 are pending. By this Amendment, the specification is amended; claims 1, 2, 6-8, 10, 11, 13 and 17 are amended; and claims 19-22 are added. Reconsideration in view of the above amendments and following remarks is respectfully requested.

The drawings were objected to. The objection is respectfully traversed.

It is respectfully submitted that Figures 4 and 5 show the claimed invention, and not simply the prior art construction of Figure 3 from a different prospect, as alleged in the Office Action on page 2, paragraph number 1. As clearly shown, for example, in the bottom right hand portion of Figure 3, the crossover portions 6C, 7C and 8C are in a staggered, or stepped, relationship. However, as clearly shown in Figure 5, the coil assembly according to the claimed invention includes a first side S1 and second side S2 and represents a rectangular configuration when viewed from the side. This is due to the fact that the main current conductor sections 6A, 6B, 7A, 7B, 8A, and 8B are configured such that the crossover sections 6C, 6D, 7C, 7D, 8C, and 8D present a rectangular configuration, not a stepped configuration.

Reconsideration and withdrawal of the objection to the drawings are respectfully requested.

Claims 1-18 are rejected under 35 U.S.C. §112, second paragraph.

In response to the rejection, independent claims 1, 8, 10 and 11 have been amended in accordance with the suggestion of the Examiner to recite that the combined crossover section heights of the crossover sections in the crossover area equal at most a height of the second coil outside the at least one crossover area. Support for the amendments may be found, for example, in paragraphs [0017] and [0053].

As shown, for example, in Figure 5, the combined height of the crossover sections 6D and 7D is equal to, at most, the height of the second coil 7. As also shown, for example, in Figure 5, the combined crossover heights of the crossover sections 6D, 7D and 8D is equal to, at most, the height of the third coil 8.

It is respectfully submitted that the amendments to claims 1, 8, 10 and 11 obviate the rejection under 35 U.S.C. §112, second paragraph and are fully supported by the specification as originally filed. Accordingly, reconsideration and withdrawal of the rejection of claims 1-18 under 35 U.S.C. §112, second paragraph are respectfully requested.

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Claims 1-18 were rejected under 35 U.S.C. §102(b) over the prior art of Figures 2 and 3 and pages 1-3 and 11-12. The rejection is respectfully traversed.

As disclosed in paragraph [0050], the coil assembly 12 of Figure 3 includes three coils, 6, 7, and 8. In the configuration shown in Figure 3, the crossover sections 6C, 7C and 8C on one side of the coil assembly 12 and the crossover sections 6D, 7D and 8D on the other side of the coil assembly 12 overlap on another at least partially. Accordingly, the height $h1$ of the coil assembly near the crossover section is greater than the height of the coil assembly near the current conductor sections 6A-8B.

However, as shown in Figure 5, the coil assembly of the claimed invention includes crossover sections of each coil having a crossover section height $h2$ that are chosen such that the combined crossover section heights $h2$ are smaller than the coil height $h1$. Accordingly, it is respectfully submitted that the prior art of Figures 2 and 3 does not disclose or suggest the coil arrangement recited in each of independent claims 1, 8, 10 and 11 and does not anticipate or render obvious these claims.

Claims 2-7, 9, 12-18 and new claims 19-22 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claims 1, 8, 10 and 11 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection over the prior art of Figures 2 and 3 are respectfully requested.

Claims 1, 3, 5-12 and 16-18 were rejected under 35 U.S.C. §102(b) over Korenaga (U.S. Patent 6,265,793). The rejection is respectfully traversed.

It is respectfully submitted that Korenaga discloses essentially the same coil assembly configuration shown in Figure 3 of the instant application. In other words, it is respectfully submitted that Korenaga merely discloses the prior art discussed in the instant application. As shown in Figure 5 of Korenaga, the coil assembly clearly includes the combined crossover section heights which are greater than the height of the second coil outside the at least one crossover area. Accordingly, Korenaga cannot anticipate or render obvious claims 1, 8, 10 or 11.

Claims 2-7, 9, 12-18 and new claims 19-22 recite additional features of the invention and are allowable for the same reasons discussed above with respect to claims 1, 8, 10 and 11 and for the additional features recited therein.

Reconsideration and withdrawal of the rejection over Korenaga are respectfully requested.

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In view of the above amendments and remarks, Applicants respectfully submit that all the claims are allowable and that the entire application is in condition for allowance.

Should the Examiner believe that anything further is desirable to place the application in better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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